Maine State Planning Office
Waste Management & Recycling Program

***Fact Sheet*: WHAT ARE 'AVOIDED DISPOSAL COSTS' ?**

Controlling the cost of managing solid waste is a major goal for most Maine communities. An important step in this process is to accurately determine cost data for the solid waste program and use that information to make sound decisions. One decision that faces many managers is how to improve the effectiveness of a recycling program. This fact sheet is intended to help managers calculate and compare costs of disposal versus recycling so they can evaluate the financial impact of their decisions.

AVOIDED COST?

Avoided cost is the dollar amount NOT spent on solid waste disposal because that tonnage is being managed by other methods such as recycling or composting. The value of "avoided cost" is that it allows for accurate comparisons between disposal costs and alternative management costs; in accounting terms, you need to compare *the net cost of solid waste disposal against the net cost of the recycling program*.

In order for this to be accurate, it is first necessary to establish some parameters. Is the cost of collection included? Does the cost of processing the recyclables for market include only those costs associated with that activity? How are the labor costs divided if both the transfer station and recycling center are operated by the same crew? Are the full costs of labor (benefits, replacement, risk charges) properly accounted for? And there may be others, depending upon your community.

Once those costs are calculated and compared, then the 'avoided disposal cost' is the difference between the net cost of disposal and the net cost of the alternative management system. Often, the value of the recyclables can be used to offset the recycling program costs, depending on the recycling markets. Using an average market value (based on the past two market years or so) may be useful in that it does reflect a reasonable number that could be used in determining a program's value.

For example: *$75/ton (solid waste management and disposal costs) - $50/ton (recycling processing and marketing costs) = $25/ton (avoided cost)*

This represents the amount of money that is not spent (therefore 'saved') by residents for each ton of solid waste that is recycled instead of disposed of.

Disposal costs

When calculating disposal costs, the total costs of disposing of solid waste (collection or transfer station operation costs, disposal, and administrative costs) are added together and then divided by the total number of tons managed; this is the ***cost per ton***. In determining the various cost components, it is important to include all costs associated with furnishing that service.

The following example considers a transfer station service provided by taxpayers with haul to the disposal facility.

Transfer station costs	$68,000
Disposal	$55,000
Administrative	$ 5,000
Total	$128,000

Divided by total tons (1,000) = $128/ton

Towns may contract out their collection and just receive a bill by the hauler; or, in some cases, each resident is responsible for paying for some or all of the cost of hauling and perhaps even tipping fees at the disposal facility. As a result, the formula for calculating cost per ton varies from town to town. However, this basic concept can still be applied.

Recycling costs

In calculating recycling costs, the same concept applies; however, processing costs will be added in -- in both cases, it represents the cost of "removal" of those materials. A town may process recyclables itself or it may contract out those services. Again, the actual program may vary by community.

Regardless of the system, it is also important to consider revenues collected, if there are any, from the sale of the recyclables. In some cases, the revenues are already incorporated into the cost of the processing the recyclables.

Dropoff/Processing	$26,000	
Administrative	$ 8,000	
Revenues from sales	-$ 9,000	(300 tons)
Net Recycling Costs	$25,000	

Divided by total tons (300) = $83/ton

The avoided cost here would be the $128/ton minus the $83/ton -- or $45/ton.

This is a simple example but it illustrates what avoided cost is and how it can help clarify the tradeoffs between solid waste disposal and recycling. Further, if no income were considered in calculating the recycling costs, the net recycling cost would be $113/ton, still less than managing the solid waste stream for disposal.